Prescription Screening Study for Outpatient Prescribing Administration of Social Security Administrator Patients at Dr R.M Djoelham Regional General Hospital, Binjai City

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Abstract

The Impact of errors in prescription incompleteness is diverse, started from those that do not provide any risk at all to the occurrence of disability or even death. The Prescription screening is useful to prevent omissions information, poor prescribing and inappropriate prescribing. The goal of this study was to screen the completeness of administration of outpatient prescriptions for social security administrator patients in regional public hospital Dr. R.M. Djoelham at Binjai City. This is a observational research with a retrospective descriptive design, and use the purposive sampling. This research was conducted at the General Hospital Pharmacy Installation Dr. R.M. Djoelham City of Binjai. This research was conducted from April-June 2021. The population of this study was the number of patient prescriptions from January 2021 to March 2021, namely 3722 prescriptions. The total sample is 98 recipes.The data analysis used is univariate data analysis. The results of the 98 recipes show the percentage of administration of the Inscriptio reached 68.4% and was incomplete reached 31.6%, on complete Invocatio it reached 100%, on Prescriptio the complete reached 95% and the incomplete reached 5%, the Signatura complete reached 91.84% and incomplete reached 8.16%, on Subscriptio the full one reaches 100%, the complete Pro reaches 58.84% and incomplete reached 41.16%. The conclusion of this study is the percentage of complete recipes reached 67.35% while incomplete reached 32.65%. If an incomplete prescription is found, it is hoped that the pharmacy staff will confirm it with the doctor concerned.

Keyword:* *Pharmaceutical Installation, Prescription Completeness, Screening

INTRODUCTION

Based on the Regulation of the Minister of Health of the Republic of Indonesia 2016 Number 72 concerning Pharmaceutical Service Standards in Hospitals, Recipes is a written request from a doctor or dentist, to a pharmacist, either in paper or electronic form to provide and submit drugs for patients according to applicable regulations (Kemenkes RI, 2016) . Pharmaceutical services are a type of direct service that improves the quality of life of patients and protects them from irrational use of drugs. Preventing harm or injury during treatment is one of the goals of pharmacy services (Timbongol et al., 2016).

As a result of the incomplete administration of the prescription, there are several criteria from the above which often lead to errors in drug use (medication errors). Medication errors are events that are detrimental to patients due to drug use while being handled by health workers

which can actually be prevented (Purba, 2020). Problems in prescribing are one of the occurrences of medication errors (Anna Yusuf et al., 2020).

The impact of errors in incomplete prescriptions varies from not providing any risk at all to causing disability or even death. What pharmacists can do to prevent these errors from occurring in drug administration is prescribing screening. Prescription screening aims to prevent omissions in the inclusion of information, poor prescription writing and inappropriate prescription writing (Ismaya et al., 2019). In prescribing screening, three aspects must be considered: administrative completeness, pharmaceutical suitability, and clinical considerations (Mukhlishah & Dipura, 2019). The administrative aspect of the prescription was chosen because it is the initial screening when the medication is served at the pharmacy; executive screening needs to be done because it includes all information in the prescription related to the clarity of the drug writing, the validity of the medication, and the transparency of the information in the medicine (Aryzki et al., 2021).

The main task of the pharmacist in the hospital is to review the completeness of the prescription so that the treatment carried out by the doctors in the hospital is rational and 5T, namely the right drug, the right patient, the right dose, and given at the right time at the right price according to the patient's ability. Therefore, monitoring of prescriptions by pharmacists is carried out on prescriptions written by doctors (Rikomah, 2017). The distribution stage is a stage of a very important and complex drug management cycle, while drug use is an important stage and becomes the main orientation in pharmaceutical services (Liwu et al., 2017).

One of the pharmaceutical services in the hospital is serving prescriptions from a doctor at the hospital. In prescription services, administrative completeness including the patient's name, patient's age, patient's gender, weight and height patient's body, doctor's name, doctor's Practice License Number, doctor's initials, the date of the prescription, the room/unit the recipe came from (Rauf et al., 2020). As a result of the incomplete administration of the prescription, there is Some of the criteria above that often lead to errors in drug use (medication errors). medication error is any incidents that happened during medication which could endangering patient's life, resulting in unappropriate health services basically could be prevented during any points of medication process (Rauf et al., 2020).

Based on the results of previous research conducted by Hamid et al., (2020) showed 86.1% complete recipe and 13.9% prescription incomplete. Based on the results of research conducted by Hutagalung (2019) showed that there were 93.3% complete recipes and 6.1% incomplete recipes. Based on the results of research that conducted by Hartati et al., (2021)

shows the completeness of prescription administration fulfills the requirements of 74.73% and which does not meet the requirements of 25.26%.

Based on the results of research conducted by previous researchers who it has been gathered that it is clear that there are still many incompleteness in recipe writing. Therefore, the researcher is interested in conducting a study on Administrative Aspect Prescription Screening on social security administrator outpatients at regional public hospital Dr. R.M. Djoelham City of Binjai. Screening the completeness of prescriptions is a very important activity to guarantee the legality of a prescription and minimize medication errors.

METHODS

This type of research is an observational study with a retrospective descriptive research design based on prescription data at the Dr. R.M. Djoelham City of Binjai. This research was conducted at the General Hospital Pharmacy Installation Dr. R.M. Djoelham City of Binjai. This research was conducted from April 2021 to June 2021. The population of this study was the number of patient prescriptions from January 2021 to March 2021, namely 3722 prescriptions.

The sampling technique used purposive sampling method. In this study, the sample size was determined using the Slovin formula. So the number of samples in this calculation is 98 recipes that will be used for research. The type of data in this study is secondary data obtained from existing data or those that have been collected from the Dr. R.M. Djoelham, Binjai City, in the pharmaceutical installation room which contains prescription data from January 2021 to March 2021. Data collection was carried out by obtaining prescriptions that had been collected by the regional general hospital Dr. R.M Djoelham City of Binjai. The data analysis used is univariate data analysis, namely where after the data is processed then the data is presented in the form of proportions in the frequency distribution table which aims to explain or describe the data using SPSS software version 20.

RESULTS

This research was conducted at regional public hospital Dr. R.M. Djoelham City of Binjai with the number of recipe population is 3722 recipe sheets. The sample used on In this study, there were 98 recipe sheets using the Slovin formula. Data collection was carried out

retrospectively based on prescription data in dr. R.M Djoelham at Binjai city from January 2022 to March 2022.

Table 1. Percentage of prescription administration completeness

Variable	Category	Frequency	%
Complete recipe	Complete	66	67.35
	Incomplete	32	32.65

Based on table 1, the percentage of patients completing outpatient prescriptions social security administrator at regional public hospital Dr.R.M. Djoelham City of Binjai obtained the number of prescription percentages complete reaches 67.35% while the percentage of prescriptions that are not complete reached 32.65% on Inscriptio, Invocatio, Prescriptio, Signatura, Subscriptio, Pro.

Table 2. Recipe completeness in Inscriptio

Inscriptio	Number of Recipe			
	Complete		Incomplete	
	n	%	n	%
Doctor's name	98	100	0	0
SIP doctor	0	0	98	100
Doctor's practice address	98	100	0	0
Doctor initials	98	100	0	0
Prescription date	41	41.84	57	58.16
Total	**67**	**68.4**	**31**	**31.6**

Based on Table 2, the results of the patient's outpatient prescription completeness social security administrator at regional public hospital Dr. R.M. Djoelham Kota Binjai section Inscriptio. Percentage amount the greatest completeness of the prescription, namely the name of the doctor, the address of the doctor's practice, Doctor's initials reached 100% (98 prescription sheets) while the total The smallest completeness of the prescription is the Doctor's Practice Permit reach 0%.

Table 3. Complete recipe on Invocatio

Invocatio	Number of Recipe			
	Complete		Incomplete	
	n	%	n	%
Sign R	98	100	0	0

Based of table 3 are the results of the completeness of the patient's outpatient prescription social security administrator at regional public hospital Dr. R.M. Djoelham City of Binjai, part of Invocatio. Percentage results prescription completeness on the R mark reached 100% (98 recipe sheets).

Table 4. Complete recipe on Prescriptio

Prescriptio	Number of Recipe			
	Complete		Incomplete	
	n	%	n	%
Drug dosage forms	93	94.90	5	5.10
Drug Dosage	91	92.86	7	7.14
Drug amount requested	95	96.94	3	3.06
Average	93	94.90	5	5.10

Based on table 4, the results of the completeness of the patient's outpatient prescription social security administrator at regional public hospital Dr. R.M. Djoelham City of Binjai Prescriptio section. Amount the highest percentage of prescription completeness is in the drug dosage form reached 94.90% (93 recipe sheets) while the number of prescription completeness was the most small, namely the drug dose reached 92.86% (91 prescription sheets).

Table 5. Recipe completeness on Signatura

Signatura	Number of Recipe			
	Complete		Incomplete	
	n	%	n	%
Drug Use Rules	90	91.84	8	8.16

Based on Table 5, the results of the completeness of the patient's outpatient prescription social security administrator at regional public hospital Dr. R.M. Djoelham, Binjai City, Signatura section. Percentage results prescription completeness in the rules for drug use reached 91.84% (90 sheets recipes) while the percentage of incomplete recipes reached 8.16% (8 sheets recipe).

Table 6. Recipe completeness in Subscriptio

Signatura	Number of Recipe			
	Complete		Incomplete	
	n	%	n	%
Doctor initials	98	100	0	0

Based on Table 6, the results of the completeness of the patient's outpatient prescription social security administrator at regional public hospital Dr. R.M. Djoelham Kota Binjai subscriptio section. Percentage results the completeness of the prescription on the doctor's initials reached 100% (98 prescription sheets).

Table 7. Recipe completeness in Subscriptio

Prescriptio	Number of Recipe			
	Complete		Incomplete	
	Frequency	Percentage	Frequency	Percentage
Patient's name	98	100	0	0
Patient Age	71	72.45	27	27.55
Patient's Weight	4	4.08	94	95.92
Average	57.67	58.84	40.33	41.16

Based on Table 7, the completeness of the patient's outpatient prescription social security administrator at regional public hospital Dr. R.M. Djoelham City of Binjai Pro part. Percentage amount the greatest completeness of the prescription, namely the patient's name, reached 100% (98 sheets prescription) while the smallest number of complete prescriptions is the patient's weight reached 4.08% (4 recipe sheets).

DISCUSSION

Hospital is a health service institution that organizes complete individual health services that provide inpatient, outpatient, and emergency services. While the General Hospital is a hospital that provides health services in all fields and types of disease (Kemenkes RI, 2020). A prescription is said to be administratively, pharmaceutically and clinically complete if the points contained in each completeness of the prescription are all listed on the prescription sheet in accordance with the existing Ministry of Health regulations (Dewi et al., 2021).

In the Inscription section, the doctor's name is one aspect that needs to be included in the prescription to ensure the authenticity of the prescription made by the doctor. The prescription is correct, and the doctor's name is also included in the order, making it easier for the pharmacist to find prescription information that is unclear when writing a prescription. Incomplete writing of a Doctor's Practice License because it is not listed in the prescription and replaced with a doctor's civil servant identification number in the form of a stamp. The prescription contains the name of the doctor and the sub/specialist doctor listed on the stamp form and the doctor's practice address contains the address of the hospital where the doctor works. The reason why doctors don't write their initials is because: doctors use a stamp as a substitute for a doctor's identity. Incompleteness in writing prescription dates due to too many patients so that the doctor's level of activity increases. Inscriptio is proof of legality in the recipe, if there is no inscriptio then the recipe could be illegal. That's why is it important to include the Inscriptio in the recipe (Hartati et al., 2021).

In the Invocatio section, the R sign is already in the recipe so doctors do not need to write an R sign. The R sign is very important in prescriptions because the R sign is a written

request from a doctor that functions as a word an opener of communication between doctors who write prescriptions and pharmacists (Octavia et al., 2021). The completeness of writing signatures on each recipe is carried out very well, because all recipes include signatures. Writing signatures (rules for use) on prescriptions is very important because to ensure the safety of the dosage and the right dose according to the patient's needs (Subagya et al., 2021).

In the Prescriptio section, incomplete form writing drug preparation, drug dosage and the amount of drug requested because the doctor did not have time write in relation to the number of patients. In the important Prescriptio section in writing prescriptions so that pharmacists are not wrong in dispensing drugs and in administering drugs to patients. Things to do pharmacy staff if there is an incomplete prescription, namely confirming it to the doctor concerned (Octavia et al., 2021). Doctors are not used to filling in complete prescription information but only prioritize certain information such as patient names and doctors' names in prescription administration information, possibly because the time owned by doctors is very limited, considering the number of patients who must be given services are so large that they do not fill in all the information in prescription administration completely (Junus et al., 2020).

On the Signatura part it is important in writing recipes so that this doesn't happen missinformation in the drug use rules. If there are no rules for use in the prescription, the pharmacist will confirm it to the doctor who is concerned. Signatura affects the accuracy of drug use for patients and has the potential to cause medication errors. Medication errors can lead to inappropriate drug use or endanger the patient. In previous research by Dinda Ayu Hardian Hartati and Rida Emelian 2021 total percentage of completeness the highest recipes Inscriptio, invocatio, signatura and pro reach 100% while the lowest percentage is Prescriptio/Ordonatio reached 28.68%. The writing in Signatura must be clear so that it is safe drug use and therapeutic success (Hartati at al., 2021).

Doctor's less legible handwriting is very difficult, so it can potentially cause misinterpretation, especially in the name of the drug, dosage, rules of use, and method of administration, which can further cause medication errors (Hindratni, 2017). Prescriptions that are written in an unclear manner will result in errors in compounding or preparing the drug and using the prescribed drug (Maalangen et al., 2019), In the subscriptio section it is important to ensure that the recipe correctly written by the doctor who wrote the prescription. If you don't have a doctor's initials prescription will raise doubts, Inside the recipe for the Subscriptio section use a stamp. Writing Subscriptio used to prevent misuse and to ensure authenticity prescription that the doctor actually made the prescription (Hartati at al., 2021).

On the Pro part it is also important so that errors do not occur drug delivery to patients. Inclusion of the patient's name in the prescription for Avoid exchanging drugs with other patients when administering drugs. Inclusion of age in the prescription to determine the dosage of drugs to avoid errors in drug dosing. Age inclusion is also useful for determine the form of drug dosage. Adult recipe using the patient's body weight, namely prescriptions for HIV disease and chemotherapy (Rauf et al., 2020). In the subscriptio section, it is important to ensure that the prescription was actually written by the doctor who wrote the prescription. If you don't have a doctor's initial on the prescription, it will raise doubts (Fardesi, 2019).

The date of writing the prescription should also be listed for patient safety regarding drug collection. The pharmacist can determine whether the prescription can still be served at the pharmacy or advised to return to the doctor regarding the patient's condition (Megawati et al., 2017).

Based on the results of the screening study of patient outpatient prescription completeness social security administrator at regional public hospital Dr. R.M. Djoelham City of Binjai, it can be concluded the amount the percentage of complete recipes reached 67.45% while the total percentage incomplete prescription reached 32.65%. The percentage number on the Inscriptio complete reached 68.4% and incomplete reached 31.6%. Amount the percentage on complete Invocatio reaches 100%. Percentage amount on complete Prescriptio it reaches 95% and incomplete reaches 5%. The percentage of complete Signatura reaches 91.84% and no complete reached 8.16%. Total percentage of completed Subscriptio reach 100%. The total percentage on the complete Pro reaches 58.84% and incomplete reached 41.16%. The researcher's assumption from the findings of the data obtained is that there still needs to be complete drug prescription data. This could be due to the need for more writing related to the prescription given by doctors or the lack of communication between pharmacists to doctors related to unclear prescriptions.

CONCLUSION

Based on the results of a screening study on the completeness of outpatient prescriptions for social security administrator patients at the Dr. R.M. Djoelham City of Binjai, it can be concluded that the percentage of complete recipes reached 67.45% while the percentage of incomplete recipes reached 32.65%. The percentage of complete Inscriptio is 68.4% and incomplete is 31.6%. The total percentage of complete Invocatio reaches 100%. The percentage of complete Prescriptio reaches 95% and incomplete reaches 5%. The percentage of complete Signatura is 91.84% and incomplete is 8.16%. The total percentage of complete Subscriptio

reaches 100%. The percentage of complete Pro reaches 58.84% and incomplete reaches 41.16%.

If an incomplete prescription is found, it is hoped that the pharmacy staff will confirm it with the doctor concerned. And for future researchers it is recommended to add related pharmaceuticals and clinics to screening the completeness of patient prescriptions in prescription studies.

REFERENCE

Anna Yusuf, V. F., Nugraha, D., & Mentari, N. (2020). Kajian Resep Secara Administrasi dan Farmasetik Pada Pasien Rawat Jalan Di RSUD dr. Soekardjo Kota Tasikmalaya Periode 10 Maret-10 April 2017. *Journal Farmasi Dan Sains Indonesia*, *3*(2), 1–16.

Aryzki, S., Wahyuni, A., Aisyah, N., Tinggi, S., Kesehatan, I., & Banjarmasin, I. (2021). Studi Deskriptif Skrining Resep Di Apotek X Banjarmasin Tahun 2019 (Descriptive Study Of Recipe Screening In Apotek X Banjarmasin in 2019). *Journal of Current Pharmaceutical Sciences*, *4*(2), 2598–2095.

Dewi, R., Sutrisno, D., & Aristantia, O. (2021). Evaluasi Kelengkapan Administrasi, Farmasetik Dan Klinis Resep Di Puskesmas Sarolangun Tahun 2019. *Pharma Xplore Jurnal Ilmiah Farmasi*, *6*(2), 1–12. https://doi.org/10.36805/farmasi.v6i2.1937

Fardesi, N. I. P. (2019). *Gambaran Kelengkapan Administratif Resep Obat Pada Pasien di Puskesmas Adiwerna*.

Hamid, F., Kotto, F. R., & Prasetia, P. W. (2020). Karakteristik Pengguna Antibiotik Tanpa Resep Dokter Di Kalangan Guru Kecamatan Labakkang, Kabupaten Pangkajene Dan Kepulauan. *Alami Journal (Alauddin Islamic Medical) Journal*, *4*(2), 18–31. https://doi.org/10.24252/alami.v4i2.15157

Hartati, D. A. H., & Emelia, R. (2021). Evaluasi Kelengkapan Resep Rawat Jalan Terhadap Kepatuhan SOP Peresepan di Poli Dalam Rumah Sakit MM Indramayu Tahun 2020. *Jurnal Health Sains*, *2*(11), 1440–1447.

HINDRATNI, F., & JAELANI, A. K. (2017). Gambaran Skrining Resep Pasien Rawat Jalan Di Puskesmas Kota Yogyakarta Tahun 2015. *Jurnal Endurance*, *2*(1), 1. https://doi.org/10.22216/jen.v2i1.1296

Hutagalung, E. (2019). *Evaluasi Skrining Kelengkapan Resep Pasien BPJS Rawat Jalan di RSUD Dr.Pirngadi Kota Medan*.

Ismaya, N. A., Tho, I. La, & Fathoni, M. I. (2019). Gambaran Kelengkapan Resep Secara Administratif dan Farmasetik di Apotek K24 Pos Pengumben. *Edu Masda Journal*, *3*(2), 148–158. https://doi.org/10.52118/edumasda.v3i2.36

Junus, D., Samad, M. A., & Pawellangi, A. B. W. (2020). Pengaruh Kelengkapan Administrasi Resep Terhadap Efektivitas Pelayanan Resep Rawat Inap Di Instalasi Farmasi RSUD Haji Provinsi Sulawesi Selatan. *Jurnal Manajemen Kesehatan Yayasan RS.Dr. Soetomo*, *6*(2), 139. https://doi.org/10.29241/jmk.v6i2.308

Kemenkes RI. (2016). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 72 Tahun 2016 Tentang Standar Pelayanan Kefarmasian di Rumah Sakit*. Jakarta : Kementerian Kesehatan RI.

Kemenkes RI. (2020). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 3 Tahun 2020 Tentang Klasifikasi Dan Perizinan Rumah Sakit*. Jakarta : Kementerian Kesehatan RI. https://peraturan.bpk.go.id/Home/Details/152506/permenkes-no-3-tahun-2020

Liwu, I., Kristanto, E. G., & Tambun, J. G. (2017). Analisis distribusi obat pada pasien Badan Penyelenggara Jaminan Sosial (BPJS) di RSUP Prof. Dr. R. D. Kandou Manado. *Jurnal Biomedik (Jbm)*, *9*(1), 40–45. https://doi.org/10.35790/jbm.9.1.2017.15383

Maalangen, T., Citraningtyas, G., & Wiyono, W. I. (2019). Identifikasi Medication Pada Resep Pasien Poli Interna di Instalasi Farmasi Rumah Sakit Bhayangkara Tk. III Manado. *Pharmacon*, *8*(2), 434–441. https://doi.org/10.35799/pha.8.2019.29310

Megawati, F., & Santoso, P. (2017). Pengkajian Resep Secara Administratif Berdasarkan Peraturan Menteri Kesehatan Ri No 35 Tahun 2014 Pada Resep Dokter Spesialis Kandungan Di Apotek Sthira Dhipa. *Jurnal Ilmiah Medicamento*, *3*(1), 12–16. https://doi.org/10.36733/medicamento.v3i1.1042

Mukhlishah, E., & Dipura, A. (2019). Gambaran Skrining Administratif Resep Obat Anti Tuberkulosis Pada Pasien Rawat Jalan di Rumah Sakit MM Indramayu. *Jurnal Farmasi Muhammadiyah Kuningan*, *4*(1), 21–26.

Octavia, D. R., Purwandini, S. N., Hilaria, M., & Pangestu, D. P. (2021). Medication Error at the Prescribing Phase. *Jurnal Info Kesehatan*, *19*(1), 12–19. https://doi.org/10.31965/infokes.vol19.iss1.417

Purba, R. (2020). *Gambaran Kelengkapan Resep Dokter Pada Instalasi Rumah Sakit Vita Insani Pematang Siantar Tahun 2019*.

Rauf, A., Muhrijannah, A. I., & Hurria, H. (2020). Kajian Skrining Resep Aspek Administratif dan Farmasetik di Apotek CS Farma Periode Juni-Desember 2018. *Ad-Dawaa' Journal of Pharmaceutical Sciences*, *3*(1), 13–39. https://doi.org/10.24252/djps.v3i1.14007

Rikomah, S. E. (2017). *Farmasi Klinik*. Yogyakarta : Deepublish.

Subagya, G., Nofrika, V., & Astuti, W. (2021). Gambaran Kelengkapan Resep Pasien Rawat Jalan di Instalasi Farmasi Rumah Sakit Tebet Periode Januari –Maret 2019. *Jurnal Farmasi IKIFA*, *1*(1), 38–45.

Timbongol, C., Astuty, W., & Sudewi, S. (2016). Identifikasi Keselahan Pengobatan (Medication Error) pada Tahap Peresepan (Prescribing) di Poli Interna Rsud Bitung. *PHARMACONJurnal Ilmiah Farmasi-UNSRAT*, *5*(3), 1–6. https://doi.org/https://doi.org/10.35799/pha.5.2016.12930